

Coordination Appendix

Youghiogheny River Lake Water Management and Reallocation Study

**District's Responses to Comments Received
During the Public Review of the December
2002 Draft Feasibility Study and
Environmental Assessment**

July 2003

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1. BACKGROUND

In January 2003, the Pittsburgh District circulated the Youghiogheny River Lake Water Management and Reallocation Study, draft Feasibility Report and Environmental Assessment, dated December 2002 for a thirty-day review period. The District received numerous comments from a group of individuals and organizations, whose names are listed below:

- 1) Honorable Judy D. Reed, Mayor of Connellsville, PA
- 2) Honorable Richard A. Kasunic, Pennsylvania State Senator, 32nd District
- 3) Scott Wendel
- 4) Roger W. Uhazie, Jr., Yough Area Fishermans Association
- 5) Paul Heyworth, Westmoreland Conservation District, Yough River Council, Sewickley Watershed Conservation Plan Committee, Penn's Corner RC&D
- 6) Tammy Shell, Executive Director, Fayette County Office of Planning, Zoning, and Community Development
- 7) Patrick F. Trimble, Member Youghiogheny River Council
- 8) John T. Shaw, former Mayor of Connellsville
- 9) Betty Cochran Haas, Vanderbilt, PA Resident
- 10) Dennis Lowe
- 11) Michael Stefl, Connellsville Resident
- 12) Ben Moyer, Trout Unlimited, Chestnut Ridge Chapter
- 13) H. Dean White, Indian Head, PA
- 14) Vincent Vicities, Chairman, Fayette County Board of Commissioners
- 15) Kevin T. Karwatsky, et. al , (Standardized "voting form" received from 75 +/- residents of Connellsville)

These individuals and groups offered a total of nearly 300 separate comments, many of which addressed similar issues or raised identical concerns. To eliminate repetitive responses, these comments have been grouped into the following general categories for further analysis:

- A. Corps Policy
- B. Need for Water and Alternative Water Sources
- C. Public Relations
- D. Local Coordination and Agency Involvement
- E. Water Quality
- F. Water Quantity
- G. Flood Control
- H. Biological Impacts
- I. Recreational Impacts
- J. Release Schedule
- K. Miscellaneous comments not fitting any particular group
- L. Off-Scope comments that were irrelevant to the proposed action.

Identical or similar comments were grouped together within the appropriate categories as shown above. The comments that are addressed below are either specific comments from one individual or a composite of the same question asked by several individuals. This categorization and grouping allowed the District to efficiently respond to and address all of the comments without redundancy. Section 2. below contains the District's responses to the categorized comments.

2. COMMENTS AND RESPONSES

CATEGORY A. COMMENTS ADDRESSING CORPS POLICY

1. **Issue/Concern:** What authority does the Corps have to reallocate storage?

District Response: See page 1 of the draft report, where Public Law 91-611, Section 216, 1970, is cited as the authority.

2. **Issue/Concern:** What authority does the Corps have to sell water?

District Response: See page 1 of the report, which cites the Water Supply Act of 1958. This is an amendment to Public Law 78-534, Section 6 (the Flood Control Act of 1944).

3. **Issue/Concern:** What authority does the Corps have to change the project's purpose?

District Response: See page 1 of the report. Section 301(b) of the Water Supply Act of 1958 (PL 78-534) authorizes the Corps to include water supply storage as a purpose.

4. **Issue/Concern:** What authority does the Corps have to establish a cost for a water/water supply agreement?

District Response: See page 1 of the report. The Engineering Regulation 1105-2-100 (April 2000) as cited, contains the specific guidance and authority, which derives from (1) the Water Resources Development Act of 1986, Sections 931 and 932, and Flood Control Act of 1970, Section 221.

5. **Issue/Concern:** What authority does the Corps have to change the release schedule?

District Response: The authority to change or adjust the reservoir releases is based upon the need to preserve flood control volume (capacity). This stems from the Flood Control Acts of 1944 and 1970, as well as the Water Resources Development Act of 1986.

6. **Issue/Concern:** There is a need for a full Environmental Impact Study.

District Response: Copies of the draft Environmental Assessment (EA) and draft Finding of No Significant Impact were mailed for review and comment to the U.S. Fish and Wildlife Service, the Environmental Protection Agency, the U.S. Department of Energy, the Maryland Department of Natural Resources, the Maryland Department of the Environment, the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, the Pennsylvania Department of Conservation and Natural Resources, and the Pennsylvania Department of Environmental Protection.

Careful and thorough engineering and environmental analysis as set forth in the report and EA indicated that the proposed reallocation effort would cause no significant adverse impacts either within the lake or downstream. The conclusions of the EA, based upon sound, professional judgment, were substantiated by the fact that none of the natural resource protection agencies listed above disagreed with its conclusions. The District maintains that the proposed reallocation plan would ultimately benefit all of the stakeholders both up and downstream of Youghiogheny Dam and that the preparation of an environmental impact statement is not warranted.

7. **Issue/Concern:** There is a bias in the report that favored the fee-paying sponsor.

District Response: The District has been aware for many years that the current operating schedule releases excess dilution water early in the year that could be conserved and stored for low flow augmentation when it is most needed, during drier periods in the summer and early fall. The sponsor, looking for additional water approached the Corps to see if additional storage could be made available for water supply. Because the District was aware of the improving water conditions, it saw in the sponsor's request, an opportunity to determine if modifying the Youghiogheny Dam's release schedule was feasible. Federal law requires that studies of this type have a local cost-sharing sponsor. The Municipal Authority of Westmoreland County (MAWC) agreed to become a sponsor of the study. Thus, the District used this opportunity to objectively analyze the present conditions to see if the facility could better serve not only the sponsor but also other downstream stakeholders and in-lake users as well. The Fayette County Municipal Authority was also invited to participate. However, they declined because their forecasted 20-year projections saw no need for additional water. There was no deliberate intent in the report to favor the sponsor over other water users.

CATEGORY B. NEED FOR WATER AND ALTERNATIVE WATER SOURCES

8. **Issue/Concern:** Does MAWC really need more water?

District Response: The MAWC does not have an immediate need for additional water; however, the MAWC realizes the importance of comprehensive planning before

the need arises. The MAWC co-sponsored the Youghiogheny River Lake Study to ensure that the river and its stakeholders will not experience any adverse impacts should the Army Corps modify its release schedule at the dam. The MAWC recognizes its role as an environmental steward and public service provider. Therefore, the MAWC commits to make no withdrawals from the Youghiogheny River in excess of the quantity allowed under their permit until at least April 2007.

9. **Issue/Concern:** MAWC has not considered all available water supply alternatives, including repairing lines to reduce leakage. Therefore, the "No Action" alternative should be pursued.

District Response: Leaks occur in all water distribution systems for a variety of reasons. The most common reasons are ground movement and deteriorating pipe. The freeze/thaw cycle is largely responsible for ground movement in southwest Pennsylvania and is beyond the control of the MAWC. On the other hand, deteriorating pipe is within the MAWC's control. Each year, the MAWC commits substantial funds to distribution system maintenance including pipe replacement projects. Over the next two years, the MAWC will replace approximately 90,000 lineal feet of pipe at a cost of \$5,400,000.

The MAWC continually monitors its distribution systems for leaks to ensure that water is conserved. In fact, the MAWC employs personnel whose only responsibility is leak detection. Additionally, the MAWC recently made a significant investment in state of the art equipment to facilitate their leak detection efforts. Also, the MAWC devotes significant effort to educate its customers about the important benefits of water conservation. The MAWC accomplishes this by providing water conservation literature and devices to the public through their public information and public education department.

10. **Issue/Concern:** Why can't MAWC withdraw their needed water from the Indian Creek Reservoir?

District Response: To maintain the stability of the Indian Creek Reservoir storage, and to preserve the integrity of the pristine and environmentally sensitive Indian Creek, MAWC allows reservoir releases to flow undisturbed into the Youghiogheny River. The permitted water withdrawal utilizes the combined (Indian Creek/Youghiogheny River) flow near Connellsville, thus minimizing impacts to the aquatic ecosystem of Indian Creek. Furthermore, this approach assures a better balance between the two streams, with neither source carrying the full withdrawal quantity used by the municipal authority.

CATEGORY C. PUBLIC RELATIONS

11. **Issue/Concern:** The Corps' presentations at public meetings were inadequate.

District Response: The Corps' study team made every effort to balance the presentations providing background, concepts, and technical information in a format that

would be understandable to both technical and nontechnical persons. Each presentation was tested before members of the government and regulatory groups to insure effective coverage. Finally, the normal rules of conduct at these public meetings were relaxed allowing presenters to digress from the agenda, and to extend the ending time by several hours in an effort to address all questions.

12. Issue/Concern: There was insufficient time for public review and comment.

District Response: By regulation, the District must provide a 30-day public review period. The report was made available on 18 December 2002, and because of the holiday season, the District extended the 30-day comment period from 18 January to 31 January 2003. Moreover, to be as accommodating as possible, comments that were received well after 31 January 2003 were accepted and included in the review process as evidenced by the date of some of the public letters reproduced at the end of this Appendix.

13. Issue/Concern: The Corps failed to solicit sufficient participation from stakeholders.

District Response: An intensive effort was undertaken during both the Reconnaissance and Feasibility phases of the study to identify all user groups (stakeholders). This included, but was not limited to sportsmen's organizations, rafters, recreational boaters (both lake and river), dock facility owners/users, commercial/industrial water users, hydropower facility, water purveyors and hiker/bicycle riders. These groups, and the anticipated impacts on each are presented in Sections 2, 8, 4, and 5.6 of the report.

14. Issue/Concern: The Corps failed to effectively interact with the public.

District Response: During each phase of the study, and at critical milestones during the feasibility investigation (e.g., water quality findings, alternative selection, etc.) meetings were held. For a chronology of public/agency involvement, see pages 44 and 45 of the draft report.

CATEGORY D. LOCAL COORDINATION AND AGENCY INVOLVEMENT

15. Issue/Concern: There is insufficient input from PADEP to address the requirements of State Act 220, which requires the State to develop a "State Water Plan" that includes demand supply projections.

District Response: State Act 220 was passed into law in December 2002 and became effective on March 17, 2003. It established a five-year period to develop a new State Water Plan that will include the formation of regional and statewide advisory committees to participate in plan development. PADEP has been an active participant in all phases of the Youghiogheny Lake study as evidenced by their presentations made at all public and technical subcommittee meetings.

16. **Issue/Concern:** PADEP did not sufficiently review the study recommendations.

District Response: PADEP, as well as all reviewers (see response to comment 12) had sufficient time to review the study. The District coordinated extensively with PADEP and invited them to all interagency and public meetings. They were very familiar with the recommended plan as well as the alternatives and made presentations at several public meetings. Those in PADEP who reviewed the report can only know the depth of their analysis. The fact that they do not object to the project evidences that, irrespective of the intensity of their review, they agree with the study's conclusions.

17. **Issue/Concern:** Why did PADEP deny MAWC's petition to amend their water allocation permit?

District Response: To our knowledge, the PADEP never denied an amendment to MAWC's allocation permit. MAWC's request for upgradient storage capacity at the Youghiogheny River Lake Dam was made for planning purposes and to ensure compliance with their existing allocation permit.

18. **Issue/Concern:** In light of the potential role of other Federal agencies, such as the Department of Homeland Defense and the Department of the Interior, the Corps should have included other agencies in the study process.

District Response: A conscious effort was made to maintain a strong agency involvement. An extensive list of stakeholders and public agencies was developed. A number of meetings and/or briefings were held with various agencies and local interests to obtain feedback throughout the study process. Page 46 of the draft report displays the membership roster for the Steering Committee and identifies the agencies included. The District also maintained study information on the District Internet site.

Also, in an effort to control Federal costs (i.e., taxpayer's money), those agencies that clearly would have no role in a study of this nature (e.g., Homeland Security), were not asked to participate.

CATEGORY E. WATER QUALITY

19. **Issue/Concern:** How will changes in the schedule and future water withdrawals by MAWC at Connellsville impact current and future pollution loads (AMD, sewage, thermal pollution, etc.).

District Response: The MAWC has a Pennsylvania Department of Environmental Protection (PA DEP) water allocation permit to withdraw water from the Youghiogheny River at Connellsville. This permit allows the MAWC to withdraw up to 50 million gallons per day (mgd); however, it also provides a protection provision to ensure that the federal low flow augmentation from the Youghiogheny River Lake is not

compromised. The re-allocation alternatives considered are to meet the needs of MAWC and protect the low flow rate (measured at the U.S. Geological Survey stream gauge at Connellsville). The reallocation of water will supply MAWC with additional water when withdrawals are increased and flows are low. This will maintain the federal low flow augmentation provided by the Youghiogheny River Lake reduce impacts from pollution loads along the river.

20. Issue/Concern: Will changes in the schedule result in the degradation of existing chemical, physical, and biological water quality of the Youghiogheny River downstream of the Dam, thereby sacrificing one of the project's primary authorized purposes, low flow augmentation for water quality?

District Response: No. The Environmental Assessment (EA) and modeling were conducted to predict the potential impacts of any alternative withdraw schedules at the dam on designated project purposes. The storage re-allocation is possible because the water quality of surface inflows downstream of the dam has improved dramatically. Historic data (USACE, 1978) show that from 1953 to about 1975 Youghiogheny Dam releases were chronically overwhelmed by gross acid mine drainage (AMD). Currently, summer season pH values on the Casselman typically do not violate Commonwealth standards (pH6.0), and often exceed the pH of the dam outflow (USACE, 1996). This improvement in water quality has largely eliminated the need for water quality releases from the dam during high Casselman River flows, allowing an opportunity re-allocate water storage and still maintain low flow augmentation for water quality.

The designated project purpose of low flow augmentation for water quality was directed towards mine drainage from tributaries downstream. With the Casselman River identified as the largest AMD contributing tributary. With current trends and restoration projects these sources of "pollution" have been reduced. The reduced need for low flow augmentation allows the release schedule to be altered to meet additional purposes.

21. Issue/Concern: Can the water quality model effectively and accurately predict water quality impacts throughout the reach of the Youghiogheny River downstream of the Dam during all seasons of the year? More specifically, was data current enough, were parameters utilized pertinent, were changes in water temperature considered, etc.?

District Response: Yes, the model can effectively and accurately predict water quality impacts throughout all seasons of the year. Two separate, best available technology models were utilized for the Youghiogheny River Lake and the regulated river downstream. These models were calibrated using data collected between March and October 1991 rather than more "current" data because they were representative of "worse case" conditions. 1991 was one of the driest years on record since the dam was constructed in 1947 and seasonal "worse case" conditions are generally observed during the summer and fall, when flows are low and water temperatures are high.

Over the past 2 decades, the severity of acid mine drainage (AMD) from tributary streams has dramatically reduced the pollution load to the Youghiogheny River but

winter/spring AMD problems still occasionally occur. Because these AMD problems generally occur outside the summer season low flow augmentation period, water temperature and dissolved oxygen, rather than pH and conductivity, were identified as the water quality parameters that could be significantly influenced by the proposed revisions to the low flow augmentation schedule and were therefore selected for use in the model.

22. Issue/Concern: Do we need to monitor water quality in the regulated reach of the Youghiogheny River after the schedule is changed?

District Response: The Corps currently maintains, real-time, continuously recording water quality and quantity monitors along the regulated reach of the Youghiogheny River and will continue to do so. The Youghiogheny River is well represented, as 4 of the Districts 15 continuous water quality/ water temperature monitors are located along this reach of Youghiogheny River.

23. Issue/Concern: Was the temperature of the entire reach of the Youghiogheny River considered as a warm water stream prior to the dam's construction?

District Response: Neither the COE nor the PA F&BC collected Youghiogheny River water temperature data prior to construction of the Dam in 1947. However, one can assume that, without the Dam, water temperatures would be comparable to those observed along reaches not impacted by operations of the Youghiogheny Dam: upstream of the Youghiogheny River Lake and downstream of South Connellsville. Currently, releases of cold water from the Dam keep the reach of the river between the Dam and South Connellsville cold enough during the summer season to support a cold-water fishery. Downstream of South Connellsville, summer river water temperatures warm to levels that are comparable to those observed in the Friendsville reach upstream of the Youghiogheny River Lake. Therefore, without the Dam, the entire reach of the river between Friendsville and the Monongahela River backwater reach at its mouth would likely support a warm-water/cool-water fishery.

24. Issue/Concern: The study fails to address water quality issues on the lower Youghiogheny River that could result from the construction of the new Braddock Dam on the Monongahela River.

District Response: Monongahela River backwater now creates an approximate 4.2-mile long embayment at the mouth of the Youghiogheny River. After construction of the new Braddock Dam, this pooled reach will be 5 feet deeper and more than double in length, increasing the potential for thermal stratification and possible dissolved oxygen depressions along this reach during summer, low flow periods. However, proposed modifications to the Youghiogheny Dam operation will have little or no impact on the water quality of this reach because, during the summer season when "worse case" conditions are likely, predicted water temperature, dissolved oxygen, and flows will be comparable to what is now observed in the River downstream of South Connellsville.

25. Issue/Concern: The Corps failed to incorporate the full range of available, relevant data in its analysis.

District Response: Currently the lake provides additional water to the river during periods of low water for the sole purpose of improving water quality with an emphasis of diluting acid mine drainage (AMD) pollution. Since the original authorization in 1940 water quality has improved and allowed the opportunity for reauthorization. This improvement is the result of more enlightened environmental practices of industry, acid mine drainage treatment projects (AMD), and modern mining techniques that reduce AMD pollution, along with an overall reduction in the area's heavy industry and mining. Long term water quality data collected by the Corps of Engineers measuring parameters related to heavy industry, mining and AMD indicate improved water quality in the Youghiogheny River. The modeling effort focused on water quantity and water temperature. Other water quality parameters were not considered in the 1940 authorization for the project and were not measured or used in the assessment or modeling for this reauthorization.

26. Issue/Concern: The Corps has not fully coordinated with PADEP regarding water quality monitoring.

District Response: The PA DEP has been interested in the examination of water supply issues at Youghiogheny River Lake for nearly 30 years and, in 1977, they requested that the District undertake hydrologic studies to determine the water supply potential of the Lake. While the PA DEP was neither directly involved in data collection nor the selection of water quality models or parameters for this effort, they played an active role on project technical and steering committees, they were regularly consulted, and they had an opportunity for review throughout the entire study process.

27. Issue/Concern: Passive AMD treatment in headwater streams will negatively affect river temperatures.

District Response: There is a possibility that some forms of AMD treatment (Settling ponds or polishing wetlands) could slightly increase water temperatures at the treatment site. However, the volume of water treated in settling ponds and polishing wetlands for AMD treatment is very small compared to the volume in the Youghiogheny River and will not impact the river water temperature.

28. Issue/Concern: The water quality data is too old.

District Response: The water quality data utilized in this study was selected not on the basis of its "age" (old data verses new data) but because of the hydrologic scenarios it represented. 1991 was (when the original water quality model was developed in 1996) one of the driest years since the reservoir went into operation in 1947. 1992 was selected because it was a relatively wet year. Just as important, both years contained sufficient water quality data for the modeling effort.

CATEGORY F. WATER QUANTITY

29. **Issue/Concern:** The Q7-10 value used in the modeling was inappropriate

District Response: The Q7-10 value (460 cfs at Connellsville) is a statistically derived minimum flow that will occur for 7 consecutive days, once every 10 years. It is not the lowest flow that will occur during a period of record. Q7-10 computation and comparison is discussed in the "Youghiogheny River Lake Water Management and Reallocation Study," Page 19, Section 5.5.3. Q7-10 values are the engineering standard for determining permit allocations.

The point was made that there have been several historical time periods where values far less than 460 cfs were recorded, at Connellsville, for periods longer than 7 consecutive days. This statement is true. However, as a statistically derived value, there will be periods where the observed values will be less than the Q7-10 value.

30. **Issue/Concern:** Why does the Corps have to model a Q7-10 stream flow when there is historical flow data available?

District Response: Q7-10 values are computed from historical records. Since the historical time frame encompassed by these records contains both without Youghiogheny Dam influence and with Youghiogheny Dam (current schedule) influence, one needs to develop a methodology to simulate the impacts of change, or Alternatives. As a result, one develops a model, verifies its accuracy by making a "verification" model run, and comparing the modeled results to the historical results. After which, one then utilizes the model as a tool, to illustrate the impacts of various changes, or Alternatives.

31. **Issue/Concern:** The predicted (modeled) flows overstate the amount of water, which will be available in the river.

District Response: The modeled flows were developed as a tool, to determine trends, which will occur if the respective Alternative is adopted. There is no proof that this impact is "overstated."

32. **Issue/Concern:** The modeled flows are inconsistent with local citizens perceptions and observations of river levels

District Response: Comments about the public's perception of low flows will not be impacted, pro or con, by changes to the operation of Youghiogheny River Dam.

33. **Issues/Concern:** The definition of terms and water quantities associated with low flow augmentation for water quality, flood control, and sedimentation rates are unclear in the report.

District Response: Several definitions, used throughout this and previous reports, follow:

Low Flow Augmentation for Water Quality: Low flow augmentation is the volume released from water stored behind the dam. If 100 cfs is entering the reservoir (inflow), and 325 cfs is leaving the dam (outflow) then the amount of augmentation is 225 cfs (outflow – inflow). If this water is being released to meet downstream water quality needs, then it is referred to as “low flow augmentation for water quality.”

Flood Control: A volume that is available to mitigate the impact of flooding. Flood control is the area available to capture excess runoff during a flood event. The lower the pool elevation, the greater the flood control storage available. There are maximum elevations that assure minimum flood control storage availability. These elevations will NOT change as a result of this study.

Sedimentation rates pertain to the speed at which sediment is deposited and the available storage is decreased. Over the past 50 years that Youghiogheny River Dam has been in place, only 1.65% of the total storage has been lost due to sedimentation. Sedimentation is not considered to be an item of concern at Youghiogheny River Lake.

34. Issue/Concern: The study did not discuss the relationship of flows required for hydropower operation to the proposed release schedule.

District Response: The hydropower plant at Youghiogheny River Lake is a run-of-river operation. Simply stated, they generate with our releases, as per the Memorandum of Agreement. Since no changes were proposed that would lower our release below that of their minimum generation (approx. 250 cfs), the major impact would occur when they would have had a higher discharge from which to pass through the plant. For instance, if the uncontrolled flow (measured at Connellsville) was low and the pool elevation at Youghiogheny Lake fell into Zone G, using the current release schedule, the plant would have 1500 cfs available for power generation. The proposed schedule would reduce that value to 900 cfs. However, the plant would have some offsetting advantages, such as higher head (pool elevation) from which to generate from. An added advantage would be a longer duration of being in Zone G.

We have discussed the study and its impact with the hydropower plant, and they are not opposed to the new release schedule.

35. Issue/Concern: The revised release schedule relating to zone D of alternative 6 is interpreted to indicate that a 20 to 25 percent reduction in flow rates occurs between 0 and 300 cfs of uncontrolled flow at Connellsville. This could adversely impact water quality in the lower reaches of the Youghiogheny River when temperatures are high and dissolved oxygen is low.

District Response: The scenario interpretation of a 20-25% reduction in flow rates is correct. However, the assumed adverse impacts to water quality in the lower reaches of the Youghiogheny River were not verified by the Water Quality Model Simulations.

36. Issue/Concern: Future water withdrawals by MAWC and others will exacerbate low flow conditions at Connellsville and downstream.

District Response: Future withdrawals (an increase of) if allotted through the Commonwealth's permitting process will have negligible impact to Connellsville and points downstream. This is the finding of the Water Management and Reallocation Study.

37. Issue/Concern: Will changes in flow associated with the recommended plan cause streambank erosion and sedimentation problems downstream?

District Response: Streambank erosion and sedimentation are exacerbated by periods of high and low flows. Since the study does not change the maximum nor minimum releases from the Youghiogheny Dam, the impact to erosion and sedimentation is null.

CATEGORY G. FLOOD CONTROL

38. Issue/Concern: The structural integrity of Youghiogheny Lake Dam has been compromised by its age and is a threat to residents downstream.

District Response: Youghiogheny Dam's structural integrity has not been compromised by its age, nor is it a threat to the residents downstream. Youghiogheny Dam is inspected daily by skilled staff, and conforms to the Corps Dam Safety Program.

39. Issue/Concern: The dam's flood control capabilities would be compromised if the proposed plan were implemented.

District Response: There are no changes to the minimum Flood Storage capabilities, which have been, and will continue to be, maintained.

40. Issue/Concern: That historical flow data used in the study is not appropriate for predicting future conditions.

District Response: Utilization of historic flow data is the best way to forecast the impact of proposed actions. Historic flow data reflects all of the changes that have occurred in the basin where the data was collected. Population changes, changes to topography and ground cover, water quality improvements or degradation are all reflected in this data.

41. Issue/Concern: Will the proposed plan cause flooding in Connellsville?

District Response: The proposed plan will not impact the flood potential of Connellsville. Flood control operations at Youghiogheny River Lake will remain the same.

CATEGORY H. BIOLOGICAL IMPACTS

42. Issue/Concern: The report states that downstream of Connellsville, the river warms to the point that a coldwater fishery is not supported year-round, however, local observations have indicated that trout are found below Connellsville throughout the year.

District Response: Although trout are found below Connellsville year round the temperature rises to the point where conditions are no longer optimal for the support of a coldwater fishery on a year round basis, and a cold/warm water fishery begins to develop. The designation of "cold water fishery" or "approved trout waters" does not indicate that the area does not support trout year round.

43. Issue/Concern: The report on the Corps' water quality sampling efforts for the feasibility study was not included for public review.

District Response: During the summer drought of 1999, the District conducted a close interval, water quality sampling survey along the regulated reach of the Youghiogheny River downstream of the Dam. The intent was to gather "worse case", pre-operational change, baseline data. Samples were collected at every mile along the mainstem and also at the mouth of all major tributaries and were analyzed for more than 40 different parameters. These data were not collected for input into the model, but rather for comparison to data collected along this same reach after the operational changes are made. Results of this survey are available upon request (Rose Reilly 412-395-7357).

44. Issue/Concern: The term "approved trout waters" used in the Environmental Assessment, Section 4.5.2, page 17, lines 2,3 and 4, should read "cold water fishery".

District Response: This area is classified as both "approved trout water" a PA Fish and Boat Commission designation for stocking purposes and "cold water fishery" a PA Department of Environmental Protection designation.

CATEGORY I. RECREATIONAL IMPACTS

45. Issue/Concern: No mention was given in the report about river recreation downstream of Connellsville, and that the river downstream of the City is so shallow at times that rafting trips had to be cancelled.

District Response: The revised release schedule, if adopted, will not have a negative impact on flow in the Youghiogheny River below Connellsville. This problem may well continue during periods of low natural flow, but the situation will not worsen as a result of revisions to the release schedule as described in the Feasibility Report and EA.

The revised schedule would actually result in slightly better conditions below Connellsville under most scenarios.

46. Issue/Concern: When operating in zone D with the uncontrolled flow at Connellsville between 0 and 300 cfs, the proposed flow rates between the dam and Connellsville will be 100 cfs lower than at present, which will affect river boating and recreational fishing.

District Response: This is part of the plan to conserve water in the reservoir when possible for later use in dry periods, if needed. If the uncontrolled flow at Connellsville is at the absolute minimum of 0 cfs, there would still be 500 cfs provided by Youghiogheny Lake under the revised schedule. This flow is above the minimum required to support the whitewater rafting industry and is sufficient to provide an enjoyable whitewater experience. Also, it would not be unheard of to have a flow of 500 cfs under the current release schedule and we would not anticipate any negative impacts on the recreational fishery.

47. Issue/Concern: Given that the main boating season ends after Labor Day, (excluding some weekend fishing), the trade-off of holding water in the lake for a longer boating season versus releasing it sooner to dilute pollution is not justified in the report.

District Response: One of the primary reasons for entering into this study was the realization that the Corps is currently releasing lake water in a manner intended to dilute historically high pollution levels which are no longer there. The study allowed the Corps to review the release schedule in light of current conditions in the basin and make improvements to better reflect current needs and uses. Although many people consider Labor Day to be the end of the boating season, a review of monthly visitation figures at the various recreation areas at Youghiogheny Lake shows that there is significant interest in boating well into the fall. Extending the recreational boating season on the lake when conditions permit is seen as a positive benefit that will address concerns that are frequently raised by project visitors.

48. Issue/Concern: Additional detail should be provided regarding boat usage at Youghiogheny Lake after Labor Day (preferably including a comparison with Cheat Lake) to support the recreation benefits outlined in the report.

District Response: The Corps collects visitation data from numerous recreation areas around Youghiogheny Lake on a monthly basis and has done so for many years. The recreation benefits mentioned in the report were based on an analysis of visitation data from 1996 through 2000; a period that included both wet and dry years. As stated in the report, many variables (weather, reservoir levels, perceptions of overcrowding, etc.) affect the number of boaters visiting a lake at any given time. The recreation impact estimates were based on Corps protocol for estimating benefits related to recreation and professional judgment as to numbers of additional boaters that might be expected in the event that the boating season was extended by up to a few weeks.

Although Cheat Lake is located in the same geographical area as Youghiogheny Lake, the two projects are significantly different in a number of important ways. While Youghiogheny Lake is a multipurpose reservoir whose operation must balance flood control, water quality, and downstream recreation needs, Cheat Lake was constructed for one purpose (hydropower) and has a much more stable pool than Youghiogheny Lake. Also, Federal ownership of the land around Youghiogheny Lake limits the amount of private and commercial development adjacent to the lake, which is not the case at Cheat Lake. For the purposes of this study, there was no perceived rationale for including a comparison of Youghiogheny Lake to Cheat Lake.

49. Issue/Concern: The report appears to allow lake boating to take precedence over flood control.

District Response: This is absolutely not the case. As repeatedly stated in the report, although the revised schedule would allow the lake to be drawn down more slowly in most years, this would have no impact on the ability of the dam to retain flood waters and release them in a controlled manner.

50. Issue/Concern: Section 4.2 of the main report lacks statistics regarding visitors to Ohiopyle, Youghiogheny River Bike Trail, and river rafting above and below Connellsville.

District Response: Visitation figures for Ohiopyle State Park are provided in Section 2.9.2 of the Feasibility Report and Youghiogheny River recreation in general is discussed in numerous places in the Feasibility Report and Environmental Assessment. As noted on Page 31 of the Feasibility Report, the slight minor increases in river flow resulting from the adoption of the proposed alternative would be too small to have a measurable economic impact. It was determined that additional information regarding the State Park, the bike trail or the rafting and canoeing industry above and below Connellsville would be unnecessary because of the imperceptible changes in river level that would result from adopting the revised release schedule.

51. Issue/Concern: Economic impacts to Connellsville caused by perceived negative effects of the proposed plan were not analyzed or included in the report.

District Response: The study addressed the impacts of small modifications to the operating schedule of the Youghiogheny Lake facility, for the entire downstream reach of the river – including the City of Connellsville. Study parameters and impacts were analyzed in terms of all stakeholders from the dam to McKeesport. This clearly included effects to the Connellsville area.

52. Issue/Concern: The recommended plan will negatively impact the tourist industry (including whitewater rafting) and other businesses along the river in Fayette County that require a dependable supply of water.

District Response: The revised release schedule (proposed alternative) will not have a negative impact on the whitewater rafting industry or any other industry requiring a dependable supply of water below Youghiogheny Dam. The revised release schedule would actually result in improved, more stable river conditions with more water than is currently available during dry periods, particularly in the reach between the dam and the water intake at South Connellsville. Given that the current plan is to offer incremental amounts of storage, the water released in accordance with the revised schedule that is not withdrawn at South Connellsville would continue on past the intake and provide additional downstream benefits. Even if the maximum allowable amount is eventually withdrawn at South Connellsville, the flow conditions below the intake will not be any worse than they currently are.

53. Issue/Concern: That there will be adequate releases throughout the summer and fall periods so that recreation in the lower Youghiogheny River will not be adversely affected by the effort to keep more water behind the dam for longer periods to enhance lake recreation.

District Response: The findings of this study focused on river recreation in the “middle Youghiogheny River” where the whitewater industry is focused. It is our understanding that the whitewater industry’s low flow requirements are more restrictive than those found on the lower Youghiogheny River. The impact to the whitewater industry was found to be negligible. Therefore, negligible impacts would be felt along the lower Youghiogheny River as well.

CATEGORY J. RELEASE SCHEDULE

54. Issue/Concern: Statements in the Environmental Assessment made in Section 4.1.6.2, lines 19 through 31 regarding flows downstream are not substantiated in the report. Specifically, there is concern that the assessment assumes the lake will never operate in zone D during a July through September or July through November timeframe.

District Response: See page 18, Section 5.5.2 of the “Youghiogheny Lake Water Management and Reallocation Study”. A more detailed discussion is contained in the water quality report prepared as part of the earlier reconnaissance study phase. That water quality report was the result of the modeling effort, which underscored the earlier justification for the completion of a feasibility study. The reconnaissance study, along with the water quality report was subject to a public review and comment period.

55. Issue/Concern: During flood conditions, do the dam gates close and must the Corps release water to the hydropower plant?

District Response: During flood conditions, the release from the dam is decreased to a flood setting (unless it is already at or below that level). This flood setting allows the reservoir to fill with runoff from the storm event, while providing a minimum release for aquatic habitat. This flood setting release is usually passed through the

hydropower plant, which allows it to remain on-line, while still providing the flood reduction, for which the reservoir project was designed and built. If, for some reason, there is a problem with the hydropower plant, then the flood setting release is passed through the Corps' gates.

56. Issue/Concern: A significantly greater amount of water is being retained in the reservoir during the late summer and early fall than is necessary to meet the water supply requirements. This excess water should be released to augment summer and early fall flows.

District Response: The "significant" volume of water being retained in the reservoir during the late summer and early fall is NOT for water supply storage. The volume of which you refer to is actually the volume that is released for low flow augmentation for water quality. These releases are most critical during periods of low flow. This is why the proposed Alternative calls for a greater release when the flows from the Casselman River are low. The low flows (from the Casselman) carry a higher concentration of pollutants than do higher flows, whose volume difference comes from runoff. It is during these periods of higher flows from the Casselman, when we were able to reduce the releases from the dam.

CATEGORY K. MISCELLANEOUS COMMENTS

57. Issue/Concern: The effects of the proposed plan did not adequately address impacts to Connellsville.

District Response: See reply to question 51.

58. Issue/Concern: Local communities and agencies are against implementation of the recommended plan due to perceived negative impacts.

District Response: This is an unsubstantiated observation. In fact, many stakeholders, and all of the resource and regulatory agencies feel the recommended changes will be beneficial, and enhance the value of this valuable water resource.

59. Issue/Concern: Future demographic changes were not fully addressed.

District Response: In support of Draft Report Sections 3.0, Expected Future Conditions, 4.0, Problems and Opportunities, and 5.6, Economic Impact Assessment, all relevant data available from the Federal Bureau of the Census, county and local community development agencies were examined. Also, annual reports from the public water supply systems were used for forecasts of future demand. All sources showed no growth, or slight declines in population projections, and small increases in future potable water demand.

60. Issue/Concern: There is confusion regarding the names and locations and functions of MAWC's filtration plants and water intakes and other aspects and characteristics of the distribution system.

District Response: The MAWC owns and operates three water filtration plants. These include the George R. Sweeney Plant (*a.k.a., Beaver Run Plant*), Bell Twp., Westmoreland County, the Indian Creek Plant (*a.k.a., Yough Plant or Connellsville Plant*), Dunbar Twp., Fayette County, and the McKeesport Plant, City of McKeesport, Allegheny County.

Also, the MAWC owns and operates 58 water storage tanks, 39 pump stations and approximately 2,100 miles of water transmission and distribution mains. These facilities serve portions of five counties: Allegheny, Armstrong, Fayette, Indiana and Westmoreland. The function of the MAWC's treatment and distribution system is to provide a safe, reliable and affordable drinking water supply to their customers. Additional information regarding the MAWC's treatment plants and distribution area is available on line at www.mawc.org.

61. Issue/Concern: The reallocation will negatively impact all of Fayette County.

District Response: Pages 18 through 29 clearly present the expected impacts upon all stakeholders at the lake and downstream. Throughout the discussion, all indices of change show benign, negligible changes, having favorable consequences in all communities in the study area. This involves, but not limited to more consistent river flows and the opportunity for all water supplies to obtain storage.

Also, the study was not intended to be a mechanism, or a functional parameter for forecasting community growth, or quality of life changes.

62. Issue/Concern: The Corps used intimidation, threat, and underhanded means to convince individuals to support the project.

District Response: It is unfortunate that such a perception exists. The study team made every effort to accommodate local participation. A website of current information was maintained; the meeting formats and protocols were informal and allowed extensive discussion and individual comments. If any specific incident of "intimidation, threat..." can be documented, please notify the project manager with the detailed information.

63. Issue/Concern: The environmental assessment should have been accomplished by an independent agency.

District Response: The EA was completed by a staff of professional natural resource personnel and was independently reviewed by their colleagues within the Corps and within various Federal and state natural resource agencies. The EA stands as an objective evaluation of the project and its potential environmental impacts and benefits.

64. Issue/Concern: The City of Connellsville would like to enter into an agreement to use water released from Youghiogheny Lake.

District Response: As was discussed in detail at many of the public meetings, legal permission (i.e., water withdrawal permits) is issued by the Pennsylvania Department of Environmental Protection. That agency would require a justification of need, current water use statistics, and additional analyses as required by State law. Purchase of reservoir storage from the Corps would also be possible, following approval of the study recommendations, which will authorize water supply storage as a formal project purpose.

65. Issue/Concern: The Corps should explain who the “other project users” are of the dam as referred to in the executive summary of the Environmental Assessment line 11.

District Response: Most of the important “project users” were participants in either the Technical Subcommittee on Steering Committee. The groups are discussed on page 37 through 40 with a “Membership Roster” presented on page 46.

66. Issue/Concern: It is not apparent from the report how the lake levels would be affected by the new release schedule.

District Response: During a dry year, the lake level would be slightly lower than the current release schedule. This is because we would, essentially, be releasing the additional 25 cfs, which would accelerate the drawdown of the lake. During a “normal” year the pool would be a little higher, as we would manage to store more than we would release. A normal year would place us in the higher zones, where our conservation is greater than the 25 cfs we would be releasing when the pool elevation puts us in a lower zone release. A wet year will result in a much higher pool. This is the result of being in higher zone and no longer having to make large releases (1500 CFS).

67. Issue/Concern: Seventy five percent of the revenues obtained from water withdrawals furnished to Westmoreland County should be set aside for AMD treatment in the Cassleman River Watershed.

District Response: By Federal law (Public Law 78-534, Public Law 99-662, Sect. 931, Public Law 85-500 – Water Supply Act of 1958, and other legislative documents require any and all revenues obtained from the sale of reservoir storage to be returned to the Federal Treasury.

68. Issue/Concern: The reallocation will exacerbate a black fly problem and other adverse health issues.

District Response: Black flies are a naturally occurring insect and indicator of good quality, cool water.

CATEGORY L. ISSUES AND CONCERNS OUTSIDE THE SCOPE OF THE STUDY

69. Issue/Concern:

The study does not adequately address the potential impacts from current and future sewage discharges.

Why is there a need for floodwalls in Connellsville?

General dissatisfaction with the Corps of Engineers water management practices and authority and reporting practices.

There is concern over streambank erosion in the City of Connellsville.

The Corps may not have considered the water quality impacts of hydropower generation.

The Corps has not made provision for a multi-agency Youghiogheny River basin coordination review team.

The Corps should describe major highway routes over the Youghiogheny River within Connellsville.

District Response: The primary purpose of this Youghiogheny River Lake Study was to review the release schedule to determine if it could be modified to better serve the water needs of the public and stakeholders both within the lake and downstream of Youghiogheny Dam. All of the issues and concerns noted above are well outside the bounds and scope of the purpose of the investigation and, therefore, cannot be addressed.

3. RECORD OF PUBLIC MEETINGS

See page 44 and page 45 of the report, which lists all public/agency meetings held during the feasibility phase of this project from 1999 through 2002. See page 46 for steering committee and technical subcommittee representatives.

4. COPIES OF COMMENTS RECEIVED ON THE DRAFT REPORT